# General

## Guideline Title

Respiratory tract infections - antibiotic prescribing. Prescribing of antibiotics for self-limiting respiratory tract infections in adults and children in primary care.

## Bibliographic Source(s)

Centre for Clinical Practice. Respiratory tract infections - antibiotic prescribing. Prescribing of antibiotics for self-limiting respiratory tract infections in adults and children in primary care. London (UK): National Institute for Health and Clinical Excellence (NICE); 2008 Jul. 121 p. (Clinical guideline; no. 69). [67 references]

## Guideline Status

This is the current release of the guideline.

The National Institute for Health and Care Excellence (NICE) reaffirmed the currency of this guideline in 2012.

# Recommendations

## Major Recommendations

The Clinical Effectiveness and Cost Effectiveness of Antibiotic Management Strategies for Respiratory Tract Infections (RTIs)

At the first face-to-face contact in primary care, including walk-in centres and emergency departments, adults and children (3 months and older) presenting with a history suggestive of the following conditions should be offered a clinical assessment:

- Acute otitis media
- Acute sore throat/acute pharyngitis/acute tonsillitis
- Common cold
- Acute rhinosinusitis
- Acute cough/acute bronchitis

The clinical assessment should include a history (presenting symptoms, use of over-the-counter or self medication, previous medical history, relevant risk factors, relevant comorbidities) and, if indicated, an examination to identify relevant clinical signs.

Patients' or parents'/carers' concerns and expectations should be determined and addressed when agreeing the use of the three antibiotic prescribing strategies (no prescribing, delayed prescribing and immediate prescribing).

A no antibiotic prescribing strategy or a delayed antibiotic prescribing strategy should be agreed for patients with the following conditions:

- Acute otitis media
- Acute sore throat/acute pharyngitis/acute tonsillitis
- Common cold
- Acute rhinosinusitis
- Acute cough/acute bronchitis

Depending on clinical assessment of severity, patients in the following subgroups can also be considered for an immediate antibiotic prescribing strategy (in addition to a no antibiotic or a delayed antibiotic prescribing strategy):

- Bilateral acute otitis media in children younger than 2 years
- Acute otitis media in children with otorrhoea
- Acute sore throat/acute pharyngitis/acute tonsillitis when three or more Centor criteria are present.

Â Â Â Â Â Â Â Â Â Note: Centor criteria are: presence of tonsillar exudate, tender anterior cervical lymphadenopathy or lymphadenitis, history of fever and an absence of cough

For all antibiotic prescribing strategies, patients should be given:

- Advice about the usual natural history of the illness, including the average total length of the illness (before and after seeing the doctor):
    - Acute otitis media: 4 days
    - Acute sore throat/acute pharyngitis/acute tonsillitis: 1 week
    - Common cold: 1Â½ weeks
    - Acute rhinosinusitis: 2Â½ weeks
    - Acute cough/acute bronchitis: 3 weeks
- Advice about managing symptoms, including fever (particularly analgesics and antipyretics). For information about fever in children younger than 5 years, refer to 'Feverish illness in children' (NICE clinical guideline 47).

When the no antibiotic prescribing strategy is adopted, patients should be offered:

- Reassurance that antibiotics are not needed immediately because they are likely to make little difference to symptoms and may have side effects, for example, diarrhoea, vomiting and rash
- A clinical review if the condition worsens or becomes prolonged

When the delayed antibiotic prescribing strategy is adopted, patients should be offered:

- Reassurance that antibiotics are not needed immediately because they are likely to make little difference to symptoms and may have side effects, for example, diarrhoea, vomiting and rash
- Advice about using the delayed prescription if symptoms are not starting to settle in accordance with the expected course of the illness or if a significant worsening of symptoms occurs
- Advice about re-consulting if there is a significant worsening of symptoms despite using the delayed prescription

A delayed prescription with instructions can either be given to the patient or left at an agreed location to be collected at a later date.

Identifying Those Patients with RTIs Who Are Likely to Be at Risk of Developing Complications

An immediate antibiotic prescription and/or further appropriate investigation and management should only be offered to patients (both adults and children) in the following situations:

- If the patient is systemically very unwell
- If the patient has symptoms and signs suggestive of serious illness and/or complications (particularly pneumonia, mastoiditis, peritonsillar abscess, peritonsillar cellulitis, intraorbital and intracranial complications)
- If the patient is at high risk of serious complications because of pre-existing comorbidity. This includes patients with significant heart, lung, renal, liver or neuromuscular disease, immunosuppression, cystic fibrosis, and young children who were born prematurely
- If the patient is older than 65 years with acute cough and two or more of the following criteria, or older than 80 years with acute cough and one or more of the following criteria:
    - Hospitalisation in previous year
    - Type 1 or type 2 diabetes
    - History of congestive heart failure
    - Current use of oral glucocorticoids

For these patients, the no antibiotic prescribing strategy and the delayed antibiotic prescribing strategy should not be considered.

## Clinical Algorithm(s)

A clinical algorithm "Care Pathway for Respiratory Tract Infections" is provided in the original guideline document.

# Scope

## Disease/Condition(s)

Respiratory tract infections (RTIs) including:

- Acute otitis media
- Acute sore throat/acute pharyngitis/acute tonsillitis
- Common cold
- Acute rhinosinusitis
- Acute cough/acute bronchitis

## Guideline Category

Evaluation

Management

Risk Assessment

Treatment

## Clinical Specialty

Family Practice

Internal Medicine

Otolaryngology

Pediatrics

## Intended Users

Advanced Practice Nurses

Health Care Providers

Nurses

Patients

Physician Assistants

Physicians

## Guideline Objective(s)

To provide evidence-based recommendations to guide healthcare professionals in the appropriate prescribing of antibiotics for self-limiting respiratory tract infections in adults and children in primary care

## Target Population

Adults and children (3 months and older) presenting in primary care settings with respiratory tract infections (RTIs) for whom immediate antibiotic prescribing is not indicated

Note: Adults and children with RTIs in whom further investigation and/or immediate antibiotic prescribing is appropriate will not be covered.

## Interventions and Practices Considered

1. Medical history including symptoms, use of over-the-counter medications, relevant risk factors and comorbidities
2. Clinical examination as needed
3. Addressing patients' or parents'/carers' concerns and expectations when agreeing the use of the three antibiotic strategies (no prescribing, delayed prescribing, and immediate prescribing)
4. Patient education about the natural history and average length of the disease and advice about managing symptoms including fever (analgesics and antipyretics)
5. Consideration of immediate prescribing of antibiotics in selected patients at risk of developing complications

## Major Outcomes Considered

Presence, duration and severity of symptoms such as fever, pain and malaise
Risk of complications from not prescribing antibiotics
Adverse events from prescribing antibiotics (for example, diarrhoea, vomiting, rashes, abdominal pain)
Level of antibiotic prescribing, including antibiotic prescriptions consumed or collected
Resource use (including reconsultation rates and rates of referral to secondary care)
Patient satisfaction and health-related quality of life
Cost-effectiveness of delayed antibiotic prescribing

# Methodology

## Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Searches of Unpublished Data

## Description of Methods Used to Collect/Select the Evidence

Literature Search

The reviews used to develop the guideline recommendations were underpinned by systematic literature searches, following the methods described in 'The guidelines manual 2007' (see "Availability of Companion Documents" field). The purpose of systematically searching the literature is to attempt to comprehensively identify the published evidence to answer the review questions developed by the Guideline Development Group (GDG) and Short Clinical Guidelines Technical Team.

The search strategies for the reviews on the prescribing of antibiotics for self-limiting respiratory tract infections in adults and children in primary care were developed by the Short Clinical Guidelines Technical Team, in consultation with the GDG. Review questions were developed using the PICO model, and reflecting the inclusion criteria, which were translated in to search strategies using subject heading and free text terms. The strategies were run across a number of databases (e.g., MEDLINE, EMBASE and CINAHL) with no date restrictions imposed on the searches.

To identify economic evaluations the national Health Services (NHS) Economic Evaluation Database (NHS EED) and the Health Economic Evaluations Database (HEED) were searched. Reports of economic evaluations added to bibliographic databases (e.g., MEDLINE) from 2006 onwards, and quality of life data, were also sought using search filters.

In addition to the systematic literature searches, the GDG was asked to alert the Short Clinical Guidelines Technical Team to any additional evidence, published, unpublished or in press, that met the inclusion criteria.

The searches were undertaken between August 2007 and December 2007. Full details of the systematic search, including the sources searched and the MEDLINE search strategy for each review, are presented in appendix 3 of the original guideline document.

Reviewing the Evidence

The aim of the literature review was to systematically identify and synthesise relevant evidence in order to answer the specific key clinical questions developed from the guideline scope. The Technical Analyst had primary responsibility for reviewing the evidence but was supported by the Project Lead, Information Scientist, and Health Economist.

After the scope was finalised, searches based on individual key clinical questions were undertaken. The searches were first sifted by the Short Clinical Guidelines Technical Team using title and abstract to exclude papers that did not address the specified key clinical question. After selection based on title and abstract, the full text of the papers were obtained and reviewed by the Short Clinical Guidelines Technical Team in order to determine which studies should be included in the literature review. Studies suggested or submitted by the GDG and expert advisers were also reviewed for relevance to the key clinical questions and included if they met the inclusion criteria.

A full table of the included and excluded studies is shown in Appendix 4 of the original guideline document.

Currency Review

The National Institute for Health and Care Excellence (NICE) undertook a review of this guideline in 2012 and determined that the information is current. See the NICE Web site for the review decision.

## Number of Source Documents

Clinical Effectiveness

- Key clinical question 1 — 12 studies
- Key clinical question 2 — 6 studies
- Key clinical question 3 — 2 studies

Cost-Effectiveness

- One relevant economic study was included in the review
- A de novo model was developed

## Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

## Rating Scheme for the Strength of the Evidence

Levels of Evidence

Intervention Studies

1++ High-quality meta-analyses, systematic reviews of randomized controlled trials (RCTs), or RCTs with a very low risk of bias

1+ Well-conducted meta-analyses, systematic reviews of RCTs or RCTs with a low risk of bias)

1- Meta-analyses, systematic reviews of RCTs or RCTs with a high risk of bias*

2++ High-quality systematic reviews of caseâ€“control or cohort studies

High quality case-control or cohort studies with a very low risk of confounding, bias or chance and a high probability that the relation is causal

2+ Well-conducted caseâ€“control or cohort studies with a very low risk of confounding, bias or chance and a moderate probability that the relation is causal

2- Case-control or cohort studies with a high risk of confounding, bias or chance and a significant risk that the relationship is not causal*

3 Non-analytic studies (for example, case reports, case series)

4 Expert opinion, formal consensus

*Studies with a level of evidence '-' should not be used as a basis for making a recommendation.

Diagnostic Studies

Ia Systematic review (with homogeneity)[a] of level 1 studies[b]

Ib Level 1 studies[b]

II Level 2 studies[c]; systematic reviews of level 2 studies

III Level 3 studies[d]; systematic reviews of level 3 studies

IV Consensus, expert committee reports or opinions and/or clinical experience without explicit critical appraisal; or based on physiology, bench research or 'first principles'

[a]Homogeneity means there are no or minor variations in the directions and degrees of results between individual studies that are included in the systematic review.

[b]Level 1 studies are studies:

- That use a blind comparison of the test with a validated reference standard (gold standard)
- In a sample of patients that reflects the population to whom the test would apply

[c]Level 2 studies are studies that have only one of the following:

- Narrow population (the sample does not reflect the population to whom the test would apply)
- Use a poor reference standard (defined as that where the 'test' is included in the 'reference', or where the 'testing' affects the 'reference')
- The comparison between the test and reference standard is not blind
- Case control studies

[d] Level 3 studies are studies that have at least two or three of the features listed for level 2 studies.

## Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review with Evidence Tables

## Description of the Methods Used to Analyze the Evidence

Reviewing the Evidence

The papers chosen for inclusion were critically appraised by the Short Clinical Guidelines Technical Team for their methodological rigour against a number of criteria that determine the validity of the results. These criteria differed according to study type and were based on the checklists included in 'The guidelines manual 2007' (see "Availability of Companion Documents" field).

The data were extracted to standard evidence table templates. The findings were summarised by the Short Clinical Guidelines Technical Team into

both a series of evidence statements and an accompanying narrative summary.

Grading the Evidence

*Intervention Studies*

Studies that meet the minimum quality criteria were ascribed a level of evidence to help the guideline developers and the eventual users of the guideline understand the type of evidence on which the recommendations have been based.

There are many different methods of assigning levels to the evidence and there has been considerable debate about what system is best. A number of initiatives are currently under way to find an international consensus on the subject. The National Institute for Health and Clinical Excellence (NICE) has previously published guidelines using different systems and is now examining a number of systems in collaboration with the National Collaborating Centres and academic groups throughout the world to identify the most appropriate system for future use.

Until a decision is reached on the most appropriate system for the NICE guidelines, the Short Clinical Guidelines Technical Team will use the system for evidence shown in "Rating Scheme for the Strength of the Evidence" field under Intervention Studies.

It was the responsibility of the Guideline Development Group (GDG) to endorse the final levels given to the evidence.

Presenting Intervention Studies with GRADE

The reader of a guideline should be able to follow a clear path from the question posed, through the summary of the evidence collected to address the question (linking to detailed evidence tables if desired), to the consideration of the evidence and the formulation of appropriate recommendations.

Grading or Recommendations Assessment, Development and Evaluation (GRADE) is a system for grading the quality of evidence and the strength of recommendations that can be applied across a wide range of interventions and contexts. The system is a useful way to summarise evidence of effectiveness by the outcomes for which data have been collected. This approach uses an 'evidence profile' that combines presentation of quality assessment and outcome data. This then is followed by a short evidence statement summarising what the evidence has shown.

*Diagnostic Studies*

In the absence of a validated ranking system for studies reporting diagnostic tests of accuracy, NICE has developed a hierarchy for evidence of accuracy of diagnostic tests that takes into account the various factors likely to affect the validity of these studies (see the "Rating Scheme for the Strength of the Evidence" field under Diagnostic Studies). Since this hierarchy has not been systematically tested, NICE recommends that the National Collaborating Centres use the system when appropriate, on a pilot basis, and report their experience to NICE.

*Prognostic Studies*

Studies that are reviewed for questions about prognosis were addressed using the newly developed pilot checklist for prognostic studies (see Appendix 4 of the original guideline document). This checklist is based on a checklist for the quality appraisal of prognostic studiesÂ and is designed to answer questions about prognosis and address the likelihood of an outcome, for patients from a population at risk for that outcome, based on the presence of a proposed prognostic factor. Prognostic factors may be disease-specific (for example, presence/absence of particular disease feature), demographic (for example, age or sex), or may be the likely response to treatment or the presence of comorbidities.

A well designed and validated approach to summarising a body of evidence on prognosis does not currently exist. In the absence of such a system, a narrative summary of the quality of the evidence should be given, based on the quality appraisal criteria from the checklist (see Appendix 4 of the original guideline document) that were considered to be most important for the question addressed. Clinical input (such as from a GDG member) may be needed to identify the most appropriate quality criteria. This should be followed by a short evidence statement summarising what the evidence has shown. Finally, there should be a clear description of how the GDG has interpreted the evidence in reaching its recommendations.

Refer to Sections 4.2.6 and 4.2.7 in the original guideline document for more information.

Heath Economics

An economic evaluation aims to integrate data on the benefits (ideally in terms of quality-adjusted life years, or QALYs), harms and costs of alternative options. An economic appraisal will not only consider whether a particular course of action is clinically effective, but also whether it is cost effective (that is, value for money). If a particular treatment strategy is found to yield little health gain relative to the resources used, then it could be advantageous to redirect resources to other activities that yield greater health gain.

A systematic review of the economic literature relating to respiratory tract infections (RTIs) was conducted. In addition, the GDG and expert

advisers were questioned over any potentially relevant unpublished data. The search of the published literature yielded one relevant economic study. This was the only study to specifically examine delayed prescribing versus no prescribing in a full cost-utility analysis for acute otitis media. The majority of studies identified examined strategies for the diagnosis of RTI and did not follow up patients after a result was obtained. No United Kingdom (UK)-based studies were identified and no studies were identified that examined the common cold or acute cough/acute bronchitis.

Given the potentially large resource implications of antibiotic use, the cost of complications of RTIs and the potential for development of antimicrobial resistance as a result of overuse of antibiotics, a de novo model was developed that considered strategies for the prescribing of antibiotics for acute sore throat in the UK.

Health economics statements are made in the guideline in sections where the use of National Health Service (NHS) resources is considered.

## Methods Used to Formulate the Recommendations

Expert Consensus

Informal Consensus

## Description of Methods Used to Formulate the Recommendations

Developing the Guideline Scope

The draft scope, which defined the areas the guideline would and would not cover, was prepared by the Short Clinical Guidelines Technical Team on the basis of the remit from the Department of Health, consultation with relevant experts and a preliminary search of the literature to identify existing clinical practice guidelines, key systematic reviews and other relevant publications. The literature search gave an overview of the issues likely to be covered by the guideline and helped define key areas. It also informed the Short Clinical Guidelines Technical Team of the volume of literature likely to be available in the topic area, and therefore the amount of work required.

The draft scope was tightly focused and covered five clinical topic areas. The draft scope was the subject of public consultation.

Forming and Running the Short Clinical Guideline Development Group

The short clinical guideline on the prescribing of antibiotics for self-limiting respiratory tract infections in adults and children in primary care was developed by a Guideline Development Group (GDG) consisting of nine full members and the Short Clinical Guidelines Technical Team. The GDG had a chair, healthcare professional members and patient/carer members who were recruited through open advertisement. Development took 5 months and the GDG met on five occasions, every 3 to 5 weeks.

Developing Key Clinical Questions

The third step in the development of the guideline was to refine the scope into a series of key clinical questions. The key clinical questions formed the starting point for the subsequent evidence reviews and facilitated the development of recommendations by the GDG.

The key clinical questions were developed by the GDG with assistance from the Short Clinical Guidelines Technical Team. As necessary, the questions were refined into specific research questions by the project teams to aid literature searching, appraisal and synthesis. The full list of key clinical questions is shown in Appendix 2 of the original guideline document.

Developing Recommendations

For each key question, recommendations were derived from the evidence summaries and statements presented to the GDG.

The guideline recommendations were evidence based if possible; if evidence was not available, informal consensus of opinion within the GDG was used.

Evidence to Recommendations

The evidence tables and narrative summaries for the key clinical questions being discussed were made available to the GDG 1 week before the scheduled GDG meeting.

All GDG members were expected to have read the evidence tables and narrative summaries before attending each meeting. The review of the evidence had three components. First, the GDG discussed the evidence tables and narrative summaries or GRADE profiles and corrected any

factual errors or incorrect interpretation of the evidence. Second, evidence statements, which had been drafted by the Short Clinical Guidelines Technical Team, were presented to the GDG and the GDG agreed the correct wording of these. Third, from a discussion of the evidence statements and the experience of GDG members recommendations were drafted. The Short Clinical Guidelines Technical Team explicitly stated that the Guideline Development Group should consider the following criteria (considered judgement) when developing the guideline recommendations from the evidence presented:

- Internal validity
- Consistency
- Generalisability (external validity)
- Clinical impact
- Cost effectiveness
- Ease of implementation
- Patients' perspective
- Overall synthesis of evidence

The GDG was able to agree recommendations through informal consensus. The process by which the evidence statements informed the recommendations is summarised in an 'evidence to recommendations' section in the relevant evidence review of the original guideline document. Each recommendation was linked to an evidence statement if possible. If there was a lack of available evidence of effectiveness, but the GDG was of the view that a recommendation was important based on the GDG members' own experience, this was noted in the 'evidence to recommendations' section of the original guideline.

Refer to Section 4.2 of the original guideline document for more information.

## Rating Scheme for the Strength of the Recommendations

Not applicable

## Cost Analysis

A literature review was conducted to identify cost-effectiveness evidence on the five relevant respiratory tract infections.Â  Although a number of potentially useful studies were identified, only one study specifically examined delayed prescribing versus no prescribing in a full cost-utility analysis. This study was quality assessed and data extracted into evidence tables (see Appendix 6 in the original guideline document for details).

The study examined the cost effectiveness of treatment option for acute otitis media (AOM). The objective of this USA-based study was to evaluate the costs and utility of four treatment options for children with AOM aged from 6 months to 12 years. The setting was primary care offices. Four intervention strategies were included: watchful waiting, delayed prescription, 5 days of immediate amoxicillin, and 7 to 10 days of immediate amoxicillin. A decision analytic model was used to evaluate the incremental cost effectiveness of the four strategies by comparing short-term outcomes and cost utilities. The analysis adopted a societal perspective and included non-healthcare costs associated with parental work loss and transportation. The time horizon of the analysis was 30 days. The authors state that this reflects the lack of evidence on long-term outcomes for otitis media such as recurrent AOM and tympanic membrane rupture.

The strategy with the highest benefit in terms of quality-adjusted life years (QALYs) was 7 to 10 days of amoxicillin. This strategy had an incremental cost-utility ratio (ICUR) of $55,900 per QALY (42,700 pounds), compared with the least costly option, which was delayed prescribing. The watchful waiting strategy was extendedly dominated by the delayed antibiotic prescribing strategy and the 7-to 10-day antibiotic prescribing strategy. The 5-day amoxicillin strategy was dominated (more costly and less effective) by the 7- to 10-day antibiotic prescribing strategy. In one-way sensitivity analysis the 7- to 10-day antibiotic prescribing strategy was compared with the delayed antibiotic prescribing strategy; the costs that had the greatest effect on the ICUR were amoxicillin prescribing, non-healthcare items, office consultations and work loss.

De Novo Economic Evaluation

Given the scarcity of economic evaluations of delayed versus no antibiotic prescribing strategies for respiratory tract infections (RTIs) in primary care, it was considered appropriate to carry out a de novo economic analysis. A model was developed to estimate the cost effectiveness of a delayed antibiotic prescribing strategy compared with immediate or no antibiotic prescribing strategies for the management of one of the RTIs covered in the guideline, acute sore throat. The economic evaluation consisted of a decision-tree analysis incorporating a care pathway for the management of patients with sore throat.

The model suggests that the least costly option is to adopt a delayed antibiotic strategy. This strategy is associated with an expected cost of 14 poundsÂ per patient compared with 16 poundsÂ and 45.50 poundsÂ for the no antibiotic and immediate antibiotic prescribing strategies, respectively.

The incremental cost-effectiveness ratio (ICER) for an immediate antibiotic prescribing strategy over a delayed prescribing strategy was 3,628,772 poundsÂ per QALY gained. The delayed antibiotic strategy dominated the no antibiotic strategy (was less costly and more effective) in the base case.

Refer to section 2.2.2 and Appendices 5 and 6 of the original guideline document for more information about cost analysis.

### Method of Guideline Validation

External Peer Review

Internal Peer Review

### Description of Method of Guideline Validation

The guideline was validated through two consultations:

1. The first draft of the guideline (The full guideline, National Institute for Clinical Excellence [NICE] guideline and Quick Reference Guide) were consulted with Stakeholders and comments were considered by the Guideline Development Group (GDG).
2. The final consultation draft of the full guideline, the NICE guideline and the Information for the Public were submitted to stakeholders for final comments.

The final draft was submitted to the Guideline Review Panel for review prior to publication.

## Evidence Supporting the Recommendations

### Type of Evidence Supporting the Recommendations

The type of the evidence supporting the recommendations is described in the "Evidence Review" and "Evidence to Recommendations" sections of the original guideline document.

## Benefits/Harms of Implementing the Guideline Recommendations

### Potential Benefits

Appropriate prescribing of antibiotics for self-limiting respiratory tract infections in adults and children in primary care

### Potential Harms

Adverse effects of antibiotics

## Qualifying Statements

### Qualifying Statements

This guidance represents the view of the Institute, which was arrived at after careful consideration of the evidence available. Healthcare

professionals are expected to take it fully into account when exercising their clinical judgement. However, the guidance does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer and informed by the summary of product characteristics of any drugs they are considering.

Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to avoid unlawful discrimination and to have regard to promoting equality of opportunity. Nothing in this guidance should be interpreted in a way that would be inconsistent with compliance with those duties.

# Implementation of the Guideline

## Description of Implementation Strategy

Piloting and Implementation

It is beyond the scope of the work to pilot the contents of this guideline or validate any approach to implementation. These limitations excepted, every effort has been made to maximise the relevance of recommendations to the intended audience through the use of a guideline development group with relevant professional and patient involvement, by use of relevant experienced expert reviewers and the stakeholder process facilitated by the National Institute for Health and Clinical Excellence (NICE) Short Clinical Guidelines Technical Team. Implementation support tools for this guideline will be available from the Implementation Team at NICE.

Audit Methods

The guideline recommendations have been used to develop clinical audit support for monitoring local practice. This is an essential implementation tool for monitoring the uptake and impact of guidelines, and thus needs to be clear and straightforward for organisations and professionals to use.

NICE develops audit support for all its guidance programmes as part of its implementation strategy.

## Implementation Tools

Audit Criteria/Indicators

Clinical Algorithm

Patient Resources

Quick Reference Guides/Physician Guides

Resources

Slide Presentation

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

# Institute of Medicine (IOM) National Healthcare Quality Report Categories

## IOM Care Need

Getting Better

## IOM Domain

Effectiveness

Patient-centeredness

# Identifying Information and Availability

## Bibliographic Source(s)

Centre for Clinical Practice. Respiratory tract infections - antibiotic prescribing. Prescribing of antibiotics for self-limiting respiratory tract infections in adults and children in primary care. London (UK): National Institute for Health and Clinical Excellence (NICE); 2008 Jul. 121 p. (Clinical guideline; no. 69). [67 references]

## Adaptation

Not applicable: The guideline was not adapted from another source.

## Date Released

2008 Jul (reaffirmed 2012)

## Guideline Developer(s)

National Institute for Health and Care Excellence (NICE) - National Government Agency [Non-U.S.]

## Source(s) of Funding

National Institute for Health and Clinical Excellence (NICE)

## Guideline Committee

Guideline Development Group

## Composition of Group That Authored the Guideline

*Group Members*: Paul Little, Professor of Primary Care Research and General Practitioner (*GDG Chair*); Nicky Coote, Consultant Paediatrician; Anne Joshua, Associate Director of Pharmacy, NHS Direct; Cliodna McNulty, Consultant Microbiologist; Cheryl Salmon, Patient/carer Representative; Mike Sharland, Consultant Paediatrician; Genine Riley, Senior Pharmaceutical Adviser; Matthew Thompson, General Practitioner and Clinical Lecturer in Primary Health Care; Mark Woodhead, Consultant in Respiratory Medicine

## Financial Disclosures/Conflicts of Interest

At each Guideline Development Group (GDG) meeting, all GDG members declared any potential conflict of interests. A full list of all declarations of interest made by this GDG is available on the NICE website (www.nice.org.uk ).

## Guideline Status

This is the current release of the guideline.

The National Institute for Health and Care Excellence (NICE) reaffirmed the currency of this guideline in 2012.

## Guideline Availability

Electronic copies: Available in Portable Document Format (PDF) format from the National Institute for Health and Clinical Excellence (NICE) Web site.

## Availability of Companion Documents

The following are available:

- Respiratory tract infections - antibiotic prescribing. Prescribing of antibiotics for self-limiting respiratory tract infections in adults and children in primary care. Quick reference guide. London (UK): National Institute for Health and Clinical Excellence; 2008 Jul. 2 p. (Clinical guideline; no. 69). Electronic copies: Available in Portable Document Format (PDF) from the NICE Web site.
- Respiratory tract infections - antibiotic prescribing. Costing report. Implementing NICE guidance. London (UK): National Institute for Health and Clinical Excellence; 2008 Jul. 24 p. (Clinical guideline; no. 69). Electronic copies: Available in Portable Document Format (PDF) from the NICE Web site.
- Respiratory tract infections - antibiotic prescribing. Costing template. Implementing NICE guidance. London (UK): National Institute for Health and Clinical Excellence; 2008. Various p. (Clinical guideline; no. 69). Electronic copies: Available in Portable Document Format (PDF) from the NICE Web site.
- Respiratory tract infections - antibiotic prescribing. Implementing NICE guidance. Slide set. London (UK): National Institute for Health and Clinical Excellence; 2008. 16 p. (Clinical guideline; no. 69). Electronic copies: Available in Portable Document Format (PDF) from the NICE Web site.
- Respiratory tract infections - antibiotic prescribing. Audit support. London (UK): National Institute for Health and Clinical Excellence; 2008. 10 p. (Clinical guideline; no. 69). Electronic copies: Available in Portable Document Format (PDF) from the NICE Web site.
- The guidelines manual 2007. London (UK): National Institute for Health and Clinical Excellence (NICE); 2007 April. Electronic copies: Available in Portable Document Format (PDF) from the NICE Archive Web site.

Additional accompanying guideline materials can be found on the National Institute for Health and Clinical Excellence (NICE) Web site.

## Patient Resources

The following is available:

- Use of antibiotics for respiratory tract infections in adults and children. Understanding NICE guidance - Information for people who use NHS services. London (UK): National Institute for Health and Clinical Excellence; 2008 Jul. 8 p. (Clinical guideline; no. 69). Electronic copies: Available in Portable Document Format (PDF) from the National Institute for Health and Clinical Excellence (NICE) Web site.

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## NGC Status

This summary was completed by ECRI Institute on February 8, 2010. The currency of the guideline was reaffirmed by the developer in 2012 and

this summary was updated by ECRI Institute on October 30, 2013.

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